## **VACCINE HANDLING AND STORAGE**

Recommendations of the State of California Department of Health Services Immunization Branch, January 2001 (These recommendations are not a substitute for the package insert included with each different biologic.)

| VACCINE<br>OR TOXOID   | SHIPPING<br>REQUIREMENTS   | CONDITION ON<br>ARRIVAL <sup>a</sup>  | STORAGE REQUIREMENTS  | PREPARATION<br>AND RECONSTITUTION   | AFTER OPENING OR RECONSTITUTION   | SPECIAL INSTRUCTIONS   |
|--|--|---|---|---|---|--|
| DTaP Td, DT Diphtheria, Tetanus Toxoids Pertussis Vaccines (acellular) | Should be shipped in insulated container with refrigerant. Do not freeze or store in direct contact with refrigerant.  | Should be below 10°C (50°F) but may be out of refrigeration at room temperature for up to 4 days. Should not have been frozen.              | Refrigerate immediately upon arrival. Store at 2°-8°C (35°-46°F). <b>Do not freeze</b> .  Monitor/Record storage temperatures daily.  | Shake vial before withdrawing each dose. Vaccine can be whitish, greyish, pinkish, or brownish. If particulate matter can be shaken into relatively even suspension (it will not dissolve), vaccine can be used. For DTaP-Hib combination reconstitution, see Hib section.  | Until outdated.   | Administer intramuscularly (IM) 1" 23–25g.c Do not administer in the buttocks. For infants/ young children, use anterolateral thigh (vastus lateralis); for older children/adults use deltoid.   |
| Hepatitis A and B<br>Vaccines  | Should be shipped in insulated container with refrigerant. <b>Do not freeze or</b> store in direct contact with refrigerant.                                 | Should be below 10°C (50°F) but may be out of refrigeration at room temperature for up to 4 days. Should not have been frozen. <sup>a</sup> | Refrigerate immediately upon arrival. Store at $2^{\circ}$ – $8^{\circ}$ C ( $35^{\circ}$ – $46^{\circ}$ F). <b>Do not freeze</b> . Monitor/Record storage temperatures daily.  |   | Until outdated.   | Administer intramuscularly (IM) 1" 23–25g.°  Do not administer in the buttocks. For infants/ young children, use anterolateral thigh (vastus lateralis); for older children/adults use deltoid.  |
| H. influenzae<br>type B<br>Haemophilus b<br>Conjugate Vaccine<br>(Hib) | Should be shipped in insulated container with refrigerant. <b>Do not freeze or</b> store in direct contact with refrigerant.                                 | Should be below 10°C (50°F) but may be out of refrigeration at room temperature for up to 4 days. Should not have been frozen. a            | Refrigerate immediately upon arrival. Store at $2^{\circ}-8^{\circ}C$ ( $35^{\circ}-46^{\circ}F$ ). <b>Do not freeze</b> . Monitor/Record storage temperatures daily.   | ActHIB, OmniHIB, PedvaxHIB: Reconstitute before use. Mix thoroughly before use. Use within 24 hours of reconstitution (keep refrigerated) or discard.  RECONSTITUTION FOR DTaP-HIB Combination (TriHIBit) Aventis Pasteur's DTaP "Tripedia" with Aventis Pasteur's "ActHIB" (4th dose of series only): Use within 30 minutes of reconstitution. | Hib TITER: Until outdated. Hepatitis B-Hib (Comvax): until outdated. All other Hib and DTaP-Hib combination vaccines: see prior column.                       | Administer intramuscularly (IM) 1" 23–25g.c  Do not administer in the buttocks. For infants/ young children, use anterolateral thigh (vastus lateralis); for older children/adults use deltoid.  |
| Influenza<br>Influenza Virus<br>Vaccine                                | Should be shipped in insulated container with refrigerant. Do not freeze or store in direct contact with refrigerant.  | Should be below 10°C (50°F) but may be out of refrigeration at room temperature for up to 4 days. Should not have been frozen.              | Refrigerate immediately upon arrival. Store at 2°-8°C (35°-46°F). <b>Do not freeze</b> .  Monitor/Record storage temperatures daily.  | Shake vial before withdrawing each dose.  | Until outdated.   | Administer intramuscularly (IM) 1" 23–25g.c  Do not administer in the buttocks. For infants/ young children, use anterolateral thigh (vastus lateralis); for older children/adults use deltoid.  |
| IPV<br>Inactivated<br>Poliovirus<br>Vaccine                            | Should be shipped in insulated container with refrigerant. <b>Do not freeze or</b> store in direct contact with refrigerant.                                 | Should be below 10°C (50°F) but may be out of refrigeration at room temperature for up to 4 days. Should not have been frozen.              | Refrigerate immediately upon arrival. Store at 2°-8°C (35°-46°F). <b>Do not freeze</b> .  Monitor/Record storage temperatures daily.  | Shake vial before withdrawing each dose.  | Until outdated.   | Administer intramuscularly (IM) 1" 23–25g.c or subcutaneously (SC) 5/8" 25g.c Do not administer in the buttocks. IM: For infants/young children, use anterolateral thigh (vastus lateralis); for older children/adults use deltoid. SC: Administer into subcutaneous tissue in upper arm or thigh. |
| MMR, MR<br>Measles Virus<br>Rubella Virus<br>Mumps Virus               | Use insulated container. Must use refrigerant. Maintain at 10°C (50°F) or less. May be frozen. Diluent should not be frozen and does not need refrigeration. | Should be below 10°C (50°F). <sup>a</sup>   | Vaccine: Refrigerate immediately upon arrival. Store at 2°-8°C (35°-46°F). Protect from light at all times. MMR vaccine may be frozen.  Diluent: Can store at room temperature.  15°-30°C (59°-86°F). Do not freeze.  Monitor/Record storage temperatures daily.  | Reconstitute just before using. Use only the diluent supplied.  | Protect from light. Use immediately or store in dark place at 2°–8°C (35°–46°F). Use within 8 hours after reconstitution. Discard if not used within 8 hours. | Administer subcutaneously (SC) 5/8" 25g.°  Do not administer in the buttocks. Administer into subcutaneous tissue in upper arm or thigh.   |
| Pneumococcal<br>Conjugate Vaccine                                      | Should be shipped in insulated container with refrigerant. Do not freeze or store in direct contact with refrigerant.  | Should be below 10°C (50°F) but may be out of refrigeration at room temperature for up to 4 days. Should not have been frozen. <sup>a</sup> | Refrigerate immediately upon arrival. Store at 2°-8°C (35°-46°F). <b>Do not freeze</b> .  Monitor/Record storage temperatures daily.  |   | Until outdated.   | Administer intramuscularly (IM) 1" 23–25g.c  Do not administer in the buttocks. For infants/ young children, use anterolateral thigh (vastus lateralis); for older children/adults use deltoid.  |
| Pneumococcal<br>Polysaccharide<br>Vaccine                              | store in direct contact with refrigerant.  | Should be below 10°C (50°F) but may be out of refrigeration at room temperature for up to 4 days. Should not have been frozen.              | Refrigerate immediately upon arrival. Store at 2°-8°C (35°-46°F). <b>Do not freeze</b> .  Monitor/Record storage temperatures daily.  | Shake vial before withdrawing each dose.  | Until outdated.   | Administer intramuscularly (IM) 1" 23–25g.c or subcutaneously (SC) 5/8" 25g.c Do not administer in the buttocks. IM: For infants/young children, use anterolateral thigh (vastus lateralis); for older children/adults use deltoid. SC: Administer into subcutaneous tissue in upper arm or thigh. |
| Varicella<br>Varicella Virus<br>Vaccine                                | Ship frozen with dry ice and in insulated container. Must be at or below -15°C (+5°F). Diluent should not be frozen and does not need refrigeration.         | Must be at or below -15°C (+5°F).  If temperature in freezer goes above -15°C (+5°F), call 1-800-VARIVAX for consultation.                  | Freeze immediately upon arrival. Store at or below -15°C (+5°F). Diluent can be stored at room temperature. Do not freeze diluent. May be stored at refrigerator temperature (2°–8°C, 35°–46°F) for up to 72 hours prior to reconstitution. Vaccine stored at 2°–8°C which is not used within 72 hours of removal from -15°C storage must be discarded.  For information and consultation regarding | Reconstitute with diluent just before using. Use only the diluent supplied. Administer immediately after reconstitution. Discard if not used within 30 minutes after reconstitution.  | Use within 30 minutes after reconstitution. Discard if not used within 30 minutes.  | Administer subcutaneously (SC) 5/8" 25g.°  Do not administer in the buttocks. Administer into subcutaneous tissue in upper arm or thigh.   |
|  |  |   | stability under conditions other than those described above, call 1-800-VARIVAX.  Monitor/Record storage temperatures daily.  |   |   |  |

<sup>Bif you have questions about the condition of the vaccine at the time of delivery, you should: (1) immediately place vaccine in recommended storage; and (2) notify the Quality Control office of the vaccine manufacturer; or notify the Immunization Branch, California Department of Health Services, 2151 Berkeley Way, Berkeley, CA 94704 (510/540-2065).
Check expiration date on container or vial. Rotate stock so shortest dated stock is used first. "Until outdated" is through the last day of the month of vaccine expiration.
Generally recommended needle sizes. For IM, needle length must be adequate to reach muscle; use longer needle to meet individual body mass.</sup>